Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

~~Claim~~ 1. (Currently amended) [[:]] A method ~~for~~ of removing an acidic gas component from a raw gas, comprising contacting ~~a~~ the raw gas ~~containing an acidic gas component to~~ with an aqueous alkanolamine solution[[,]] ~~wherein~~ that includes a composition ~~comprising~~ having an organopolysiloxane ~~having~~ with a polyoxyalkylene group and a fine silica powder ~~is present~~.

~~Claim~~ 2. (Currently amended) [[:]] The method ~~for removing an acidic gas component from a raw gas~~ according to claim 1, wherein ~~a~~ the composition ~~comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder~~ is ~~optionally~~ added to the aqueous alkanolamine solution, based on a foaming state in a system ~~of~~ for removing ~~an~~ the acidic gas, from ~~the~~ outside the system.

~~Claim~~ 3. (Currently amended) [[:]] The method ~~for removing an acidic gas from a raw gas~~ according to claim 1, wherein the composition is added to ~~an~~ the aqueous alkanolamine solution ~~in which a composition comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder had been contained~~

~~is used~~ before the aqueous alkanolamine solution contacts the raw gas.

~~Claim~~ 4. (Currently amended) [[:]] The method ~~for removing an acidic gas component from a raw gas~~ according to claim 1, wherein ~~the specific surface area of~~ the fine silica powder ~~is~~ has a specific surface area of 50 m^2/g or more.

~~Claim~~ 5. (Currently amended) [[:]] The method ~~for removing an acidic gas component~~ according to claim 1, wherein the composition ~~comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder~~ is present in an amount of 0.1 to 5000 ppm based on the aqueous alkanolamine solution.

~~Claim~~ 6. (Currently amended) [[:]] An additive for an aqueous amine solution for removing an acidic gas, ~~to be added to an amine solution for removing an acidic gas with an aqueous~~ the solution containing 40 % by mass or more of an alkanolamine, ~~(referred to as an amine hereinafter), wherein the composition~~ comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder ~~is~~ present in an amount of 0.1 to 5000 ppm.

~~Claim~~ 7. (Currently amended)[[:]] The additive ~~for an amine solution for removing an acidic gas~~ according to claim 6, ~~which is~~ wherein the additive is a mixture of 50 to 99 % by mass of ~~an~~ the organopolysiloxane having ~~a~~ the polyoxyalkylene group, represented by formula (1), and 1 to 50 % by mass of ~~a~~ the fine silica powder having a specific surface area of 50 m^2/g or more

$$R^1{}_2XSi\text{-}(R^1{}_2SiO)_m\text{-}(R^1YSiO)_n\text{-}SiR^1{}_2X \qquad (1)$$

(provided that R^1 represents a monovalent hydrocarbon group having 1 to 6 carbon atoms; X represents an alkoxy group having 1 to 4 carbon atoms, a hydroxyl group, R^1 or Y; Y represents $-R^2O-(C_pH_{2p}O)_q-R^3$; R^2 represents a divalent hydrocarbon group having 3 to 6 carbon atoms; R^3 represents a hydrogen atom, a hydrocarbon group having 1 to 4 carbon atoms, or an acyl group; m is an integer of 10 to 200[[,]]; n is 0 or an integer of 1 to 50[[,]]; p is an integer of 2 to 4[[,]]; and q is an integer of 5 to 50, provided that when n is 0, X is Y).

~~Claim~~ 8. (Currently amended)[[:]] The additive ~~for an amine solution for removing an acidic gas~~ according to claim ~~6~~ 7, ~~composed of~~ wherein the additive is a mixture of 50 to 98 % by mass of ~~an~~ the organopolysiloxane having ~~a~~ the polyoxyalkylene group, represented by the formula (1), 1 to 50 % by mass of ~~a~~ the fine silica powder having a BET specific surface area of 50 m^2/g or more, and 1 to 40 % by mass of a nonionic surfactant.

9. (New) A method of removing an acidic gas component from a raw gas, comprising contacting the raw gas with an aqueous alkanolamine solution that includes 40 % by mass or more of an alkanolamine and an additive having an organopolysiloxane with a polyoxyalkylene group and a fine silica powder, the additive being present in an amount of 0.1 to 5000 ppm based on the aqueous alkanolamine solution and being a mixture of 50 to 99 % by mass of the organopolysiloxane having the polyoxyalkylene group, represented by formula (1)

$$R^1{}_2XSi\text{-}(R^1{}_2SiO)_m\text{-}(R^1YSiO)_n\text{-}SiR^1{}_2X \qquad (1)$$

provided that R^1 represents a monovalent hydrocarbon group having 1 to 6 carbon atoms; X represents an alkoxy group having 1 to 4 carbon atoms, a hydroxyl group, R^1 or Y; Y represents $-R^2O\text{-}(C_pH_{2p}O)_q\text{-}R^3$; R^2 represents a divalent hydrocarbon group having 3 to 6 carbon atoms; R^3 represents a hydrogen atom, a hydrocarbon group having 1 to 4 carbon atoms, or an acyl group; m is an integer of 10 to 200; n is 0 or an integer of 1 to 50; p is an integer of 2 to 4; and q is an integer of 5 to 50, provided that when n is 0, X is Y, and

1 to 50 % by mass of the fine silica powder having a specific surface area of 50 m^2/g or more.

10. (New) The method according to claim 9, further comprising a step of providing an additional amount of the additive to the aqueous alkanolamine solution based on an amount of foaming during the acid gas removal.

11. (New) An additive for an aqueous alkanolamine solution that removes an acidic gas, comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder, the additive being present in an amount of 0.1 to 5000 ppm based on the aqueous alkanolamine solution and being a mixture of 50 to 99 % by mass of the organopolysiloxane having the polyoxyalkylene group, represented by formula (1)

$$R^1{}_2XSi\text{-}(R^1{}_2SiO)_m\text{-}(R^1YSiO)_n\text{-}SiR^1{}_2X \qquad (1)$$

provided that R^1 represents a monovalent hydrocarbon group having 1 to 6 carbon atoms; X represents an alkoxy group having 1 to 4 carbon atoms, a hydroxyl group, R^1 or Y; Y represents $-R^2O\text{-}(C_pH_{2p}O)_q\text{-}R^3$; R^2 represents a divalent hydrocarbon group having 3 to 6 carbon atoms; R^3 represents a hydrogen atom, a hydrocarbon group having 1 to 4 carbon atoms, or an acyl group; m is an integer of 10 to 200; n is 0 or an integer of 1 to 50; p is an integer of 2 to 4; and q is an integer of 5 to 50, provided that when n is 0, X is Y, and

1 to 50 % by mass of the fine silica powder having a specific surface area of 50 m^2/g or more.

12. (New) The additive according to claim 11, wherein the additive is a mixture of 50 to 98 % by mass of the organopolysiloxane having the polyoxyalkylene group, represented by the formula (1), and further comprising 1 to 40 % by mass of a nonionic surfactant.

13. (New) The additive according to claim 11, wherein the aqueous alkanolamine solution includes 40 % by mass or more of an alkanolamine.

14. (New) An additive for an aqueous alkanolamine solution that removes an acidic gas, comprising an organopolysiloxane having a polyoxyalkylene group and a fine silica powder, the additive being present in an amount of 0.1 to 5000 ppm based on the aqueous alkanolamine solution and being a mixture of 50 to 98 % by mass of the organopolysiloxane having the polyoxyalkylene group, represented by formula (1)

$$R^1{}_2XSi\text{-}(R^1{}_2SiO)_m\text{-}(R^1YSiO)_n\text{-}SiR^1{}_2X \qquad (1)$$

provided that R^1 represents a monovalent hydrocarbon group having 1 to 6 carbon atoms; X represents an alkoxy group having 1

to 4 carbon atoms, a hydroxyl group, R^1 or Y; Y represents $-R^2O-(C_pH_{2p}O)_q-R^3$; R^2 represents a divalent hydrocarbon group having 3 to 6 carbon atoms; R^3 represents a hydrogen atom, a hydrocarbon group having 1 to 4 carbon atoms, or an acyl group; m is an integer of 10 to 200; n is 0 or an integer of 1 to 50; p is an integer of 2 to 4; and q is an integer of 5 to 50, provided that when n is 0, X is Y,

1 to 50 % by mass of the fine silica powder having a specific surface area of 50 m^2/g or more, and

1 to 40 % by mass of a nonionic surfactant, such that during the acid gas removal the additive suppresses foaming of the solution and reduces corrosion of an apparatus in which the removal occurs.